

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त महायुक्त कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 29.08.2014
Date of Reporting : 30.08.2014

I. Regional Availability/Demand:

Evening Peak (20:00 Hrs) MW				Off Peak (03:00 Hrs) MW				Day Energy (Net MU)	
Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
45287	5323	50610	50.02	44000	3128	47128	50.03	1030.2	103.90

* Half hourly (two 15 minutes block--one block each before and after the designated time) average frequency

II. A. State's Load Details (At States periphery) in MUs:

State	State's Control Area Generation (Net MU)			Drawal Schedule (Net MU)	Actual Drawal (Net MU)	UI (Net MU)	Consumption (Net MU)	Shortages * (MU)	
	Thermal	Hydro	Renewable/others \$						Total
Punjab	86.73	21.61		108.35	103.29	103.84	0.55	212.18	7.50
Haryana	88.66	0.60		89.26	90.28	92.72	2.44	181.98	0.21
Rajasthan	107.78	0.00	2.88	110.66	52.14	60.54	8.40	171.20	17.11
Delhi	26.32			26.32	79.44	78.76	-0.68	105.09	0.39
UP	109.70	17.40	0.36	127.46	128.82	131.61	2.79	259.07	72.21
Uttarakhand		18.12		18.12	16.28	17.24	0.96	35.36	2.48
HP		22.98		22.98	0.09	1.48	1.39	24.46	2.31
J & K		14.66	0.00	14.66	13.94	20.18	6.23	34.84	1.70
Chandigarh				0.00	5.15	6.06	0.92	6.06	0.00
Total	419.20	95.37	3.24	517.81	489.43	512.43	23.00	1030.24	103.90

* Shortage furnished by the respective constituent. \$ Others include UP Co-generation and JK Diesel

II. B. State's Demand Met in MWs:

State	Evening Peak (20:00 Hrs) MW				Off Peak (03:00 Hrs) MW				# Max(hourly) Demand Met of Day (MW)
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	
Punjab	9653	225	44	1265	8834	0	-11	1291	9653
Haryana	8440	241	169	1639	7858	0	318	1259	8440
Rajasthan	7338	1310	375	-852	8097	493	713	37	8097
Delhi	4714	4	13	774	4107	0	-183	571	4941
UP	10541	3210	45	172	11227	2635	78	1357	11594
Uttarakhand	1614	210	18	85	1486	0	11	85	1626
HP	1066	23	0	-1150	964	0	40	-1349	1270
J&K	1651	100	195	-377	1204	0	247	-821	1652
Chandigarh	271	0	34	0	222	0	27	0	303
Total	45287	5323	893	1556	44000	3128	1241	2429	45619

* STOA figures are at sellers boundary & PX figures are at regional boundary. # figures may not be at simultaneous hour.

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III. Regional Entities :

A. NTPC	Station/ Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Sentout(MW)	Schedule Net MU	UI Net MU
		Singrauli STPS	2000	1150	1318	1147	30.39	1266	27.60
	Rihand I STPS	1000	421	425	446	10.97	457	10.10	0.87
	Rihand II STPS	1000	965	1041	1037	25.00	1042	23.16	1.84
	Rihand III STPS	1000	938	997	1011	23.93	997	22.51	1.43
	Dadri I STPS	840	813	711	788	19.61	817	18.70	0.91
	Dadri II STPS	980	478	440	464	11.14	464	11.08	0.06
	Unchahar I TPS	420	196	215	215	5.16	215	4.68	0.48
	Unchahar II TPS	420	400	438	434	10.45	435	9.55	0.90
	Unchahar III TPS	210	198	219	204	5.13	214	4.69	0.44
	I-STPP (Jhajhar)	1500	660	713	640	15.20	634	15.75	-0.55
	Dadri GPS	830	741	745	757	17.78	741	17.33	0.45
	Anta GPS	419	383	375	385	9.14	381	9.08	0.06
	Auraiva GPS	663	602	600	614	14.51	604	14.21	0.30
	Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
	Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04
	Sub Total (A)	11297	7949	8237	8142	198	8269	189	10
B. NPC	NAPS	440	269	307	308	6.43	268	6.46	-0.03
	RAPS- B	440	200	227	226	4.78	199	4.80	-0.02
	RAPS- C	440	385	408	414	8.77	366	9.24	-0.47
	Sub Total (B)	1320	854	942	948	19.98	832	20.50	-0.52
C. NHPC	Chamera I HPS	540	534	548	180	6.19	258	6.10	0.09
	Chamera II HPS	300	300	303	205	4.49	187	4.40	0.09
	Chamera III HPS	231	229	231	157	3.22	134	3.15	0.07
	Bairasuli HPS	180	178	124	62	1.70	71	1.59	0.11
	Salal-HPS	690	544	665	634	13.86	578	13.06	0.80
	Tanakpur-HPS	94	87	89	89	2.14	89	2.08	0.07
	Uri-HPS	480	399	432	409	9.89	412	9.57	0.32
	Uri-II HPS	240	223	242	227	5.46	227	5.34	0.12
	Dhauliganga-HPS	280	207	210	209	5.01	209	4.97	0.04
	Dulhasti-HPS	390	386	394	394	9.30	388	9.26	0.04
	Sewa-II HPS	120	119	130	0	0.65	27	0.60	0.05
	Parbati 3	520	130	133	130	2.37	99	2.34	0.03
	Sub Total ©	4065	3336	3500	2697	64	2679	62	2
D.SJVNL	NJPC	1500	1605	1609	1616	35.16	1465	35.08	0.07
	Rampur HEP	275	311	292	363	7.64	318	7.54	0.10
	Sub Total (D)	1775	1916	1901	1979	42.79	1783	42.62	0.17
E. THDC	Tehri HPS	1000	1056	1060	721	9.58	399	9.50	0.08
	Koteshwar HPS	400	141	382	91	3.40	142	3.35	0.05
	Sub Total (E)	1400	1197	1442	812	12.98	541	12.85	0.13
F. BBMB	Bhakra HPS	1514	1007	1336	823	24.37	1016	24.17	0.20
	Dehar HPS	990	591	825	585	14.38	599	14.19	0.19
	Pong HPS	396	212	384	126	5.06	211	5.09	-0.03
	Sub Total (F)	2900	1811	2545	1534	43.81	1826	43.45	0.36
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	123	98	2.08	87	2.76	-0.68
	KWHEP HPS(IPP)	1000	0	1100	840	19.50	812	21.01	-1.51
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.18	-0.18
	Shree Cement TPS	300	0	144	148	3.52	147	3.54	-0.01
	Budhil HPS(IPP)	70	0	50	33	0.86	36	0.92	-0.06
	Sub Total (G)	1662	0	1417	1118	25.96	1082	28.40	-2.44
H. Total Regional Entities (A-G)		24419	17062	19984	17230	408.27	17011	398.82	9.45

I. State Entities	Station	Effective Installed Capacity (MW)	Peak MW	Off Peak MW	Energy(MU)	Average(Sent out MW)
Punjab	Guru Gobind Singh TPS (Ropar)	1260	1185	1160	25.86	1078
	Guru Nanak Dev TPS(Bhatinda)	440	450	406	9.50	396
	Guru Hargobind Singh TPS(L.mbt)	920	945	948	20.64	860
	Goindwal(GVK)		0	0	0.00	0
	Rajpura	1400	1346	1345	30.74	1281
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	4680	3926	3859	86.73	3614
	Total Hydro	1148	950	895	21.61	901
	Total Punjab	5828	4876	4754	108.35	4514
	Haryana	Panipat TPS	1367	1118	1125	26.42
DCRTPP (Yamuna nagar)		600	552	552	12.79	533
Faridabad GPS (NTPC)		432	390	392	9.42	392
RGTPP (khedar) (IPP)		1200	590	581	13.87	578
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP)		1320	1140	1197	26.17	1090
Thermal (Total)		4944	3790	3847	88.66	3694
Total Hydro		62	24	25	0.60	25
Total Haryana		5006	3814	3872	89.26	3719
Rajasthan		kota TPS	1240	1014	1017	22.00
	suratgarh TPS	1500	1286	1101	27.46	1144
	Chabra TPS	750	0	162	0.47	20
	Dholpur GPS	330	118	97	2.69	112
	Ramgarh GPS	271	118	125	3.10	129
	RAPS A (NPC)	300	0	0	0.00	0
	Barsingar (NLC)	250	192	192	4.41	184
	Giral LTPS	250	70	70	1.39	58
	Rajwest LTPS (IPP)	1080	832	832	19.80	825
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	495	414	11.40	475
	Kawai(Adani)	1320	603	606	15.06	628
	Thermal (Total)	8026	4728	4616	108	4491
	Total Hydro	550	0	0	0.00	0
	Wind power	2798	43	40	1.33	55
	Biomass	99	36	36	0.86	36
	Solar	730	0	0	0.68	28
	Renewable/Others (Total)	3627	79	76	2.88	120
	Total Rajasthan	12203	4807	4692	110.66	4611
	UP	Anpara TPS	1630	635	698	16.30
Obra TPS		1194	511	468	11.20	467
Paricha TPS		1140	628	534	14.30	596
Panki TPS		210	140	81	2.90	121
Harduaganj TPS		665	383	369	8.70	363
Tanda TPS (NTPC)		440	372	374	9.00	375
Roza TPS (IPP)		1200	801	801	19.20	800
Anpara-C (IPP)		1200	908	914	21.70	904
Bajaj Energy Pvt.Ltd(IPP) TPS		450	284	284	6.40	267
Thermal (Total)		8129	4662	4523	109.70	4571
Vishnuparyag HPS (IPP)		400	436	436	10.40	433
Other Hydro		527	305	329	7.00	292
Cogeneration		981	15	15	0.36	15
Total UP		10037	5418	5303	127.46	4878
Uttarakhand		Total Hydro	1398	763	747	18.12
	Total Uttarakhand	1398	763	747	18.12	755
Delhi	Raighat TPS	135	52	51	1.15	48
	Delhi Gas Turbine	282	149	153	3.55	148
	Pragati Gas Turbine	330	286	290	7.01	292
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	1370	441	444	10.99	458
	Badarpur TPS (NTPC)	705	135	135	3.63	151
	Thermal (Total)	2917	1063	1073	26.32	1097
	Total Delhi	2917	1063	1073	26.32	1097
HP	Baspa HPS (IPP)	300	284	335	7.10	296
	Malana HPS (IPP)	86	52	52	1.17	49
	Other Hydro	728	607	613	14.71	613
	Total HP	1114	943	1000	22.98	957
J & K	Baqilhar HPS (IPP)	450	450	450	10.80	450
	Other Hydro/IPP	436	157	188	3.86	161
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	607	638	14.66	611
Total State Control Area Generation		39597	22291	22079	517.81	21142
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4251	5634	120.34	5014
Total Regional Availability(Gross)		64017	46526	44943	1046.42	43167

IV. Total Hydro Generation:

Regional Entities Hydro	11432	10611	7960	185.45	7727
State Control Area Hydro	5684	3592	3634	95.37	3541
Total Regional Hydro	17116	14203	11594	280.82	11268

V(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(20:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	
Vindhychal B/B	500	400	500	0	11.77	0.00	11.77
Gwalior-Agra (D/C)	1581	1960	2403	0	46.21	0.00	46.21
Zerda-Kankroli	-175	-26	0	298	0.00	3.81	-3.81
Zerda-Bhinmal	-82	62	71	389	0.00	2.57	-2.57
Malanpur-Auraiya	-137	-141	0	193	0.00	3.10	-3.10
Badod-Kota/Morak	-52	51	51	119	0.00	7.30	-7.30
Mundra-Mohindergarh(HVDC)	1299	997	1512	0	28.99	0.00	28.99
Vindhychal - Rihand	338	332	342	0	10.43	0.00	10.43
Sub Total WR	3272	3635			97.40	16.78	80.62
Pusauli Bypass	-364	-145	0	364	0.00	5.13	-5.13
MZP- GKP (D/C)	344	762	774	0	14.70	0.00	14.70
Patna-Balia(D/C)	307	476	621	0	10.52	0.00	10.52
B'Sharif-Balia (D/C)	293	370	545	0	8.37	0.00	8.37
Pusauli-Balia	61	14	76	0	0.71	0.00	0.71
Gaya-Fatehpur (765 Kv)	14	107	110	0	1.80	0.00	1.80
Pusauli-Sahupuri	140	144	193	0	3.10	0.00	3.10
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	-33	0	46	0.00	0.87	-0.87
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	224	304	331	0	6.53	0.00	6.53
Sub Total ER	979	1999			45.73	6.00	39.72
Total IR Exch	4251	5634			143.13	22.79	120.34

V(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

ISGS/LT Schedule (MU)			Bilateral Schedule (MU)		Power Exchange Shdl (MU)		Wheeling (MU)	
ER	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
24.08	3.84	27.93	10.15	3.69	-0.09	20.38	-0.60	0.60

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR incld Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
37.39	69.89	107.28	39.72	80.62	120.34	2.33	10.73	13.06

VI. Frequency Profile

% of Time Frequency									
<49.2	<49.7	<49.8	<49.9	<50.0	49.9-50.05	50.05-50.10	50.10-50.20	>50.20	>50.50
0.00	1.03	7.20	30.97	68.37	54.78	10.28	4.02	0.00	NA

Frequency (Hz)				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz				
50.18	10.03	49.62	4.14	49.95	0.13	0.10	50.18	49.79

VII. Voltage profile 400 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)			
		Voltage(KV)	Time	Voltage (KV)	Time	<380 kV	<390 kV	>420 kV	>430 kV
Rihand	400	405	10:07	400	10:35	0.0	0.0	0.0	0.0
Gorakhpur	400	415	19:01	394	12:24	0.0	0.0	0.0	0.0
Bareilly	400	416	18:05	398	11:20	0.0	0.0	0.0	0.0
Kanpur	400	416	18:03	402	15:34	0.0	0.0	0.0	0.0
Dadri	400	410	06:01	395	15:40	7.1	7.1	0.0	0.0
Ballabgarh	400	418	06:01	400	15:28	0.0	0.0	0.0	0.0
Bawana	400	412	06:00	398	22:07	0.0	0.0	0.0	0.0
Bassi	400	429	10:57	397	15:39	0.0	0.0	27.5	0.0
Hissar	400	407	06:00	392	15:28	0.0	0.0	0.0	0.0
Moga	400	412	05:01	397	19:10	0.0	0.0	0.0	0.0
Abdullapur	400	413	06:02	396	19:10	0.0	0.0	0.0	0.0
Nalagarh	400	417	06:01	406	15:38	0.0	0.0	0.0	0.0
Kishenpur	400	416	06:01	404	20:14	0.0	0.0	0.0	0.0
Wagoora	400	412	03:59	391	20:12	0.0	0.0	0.0	0.0

VIII. Voltage profile 765 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)			
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV
Fatehpur	765	770	18:04	740	22:16	0.0	0.7	0.0	0.0
Balia	765	773	19:00	740	12:24	0.0	2.9	0.0	0.0
Moga	765	787	06:02	761	15:40	0.0	0.0	0.0	0.0
Agra	765	784	06:02	756	22:18	0.0	0.0	0.0	0.0
Bhiwani	765	788	06:02	759	22:08	0.0	0.0	0.0	0.0
Unnao	765	763	18:04	739	12:23	0.0	23.1	0.0	0.0

IX. Reservoir Parameters:

Name of Reservoir	Parameters		Present Parameters		Last Year		Last day	
	FRL (m)	MDDL (m)	Level (m)	Energy (MU)	Level (m)	Energy (MU)	Inflow (m ³ /s)	Usage (m ³ /s)
Bhakra	513.59	445.62	509.82	1545.02	510.38	1560.04	809.01	731.85
Pong	426.72	384.05	416.24	730.66	422.45	1005.78	248.00	307.52
Tehri	829.79	740.04	814.35	882.26	819.95	1002.27	300.59	218.00
Koteshwar	612.50	598.50	610.46	4.95	609.35	4.21	218.00	225.00
Chamera-I	760.00	748.75	751.26	11.88	0.00	0.00	161.06	168.10
Rihand	268.22	252.98	0.00	0.00	259.72	289.60	0.00	0.00
RPS	352.80	343.81	0.00	0.00	0.00	0.00	0.00	0.00
Jawahar Sagar	298.70	295.78	0.00	0.00	0.00	0.00	0.00	0.00
RSD	527.91	487.91	514.38	11.56	524.05	10.80	154.58	493.08

* NA: Not Available

X(A). Short-Term Open Access Details:

State	Off- Peak Hours (03:00 Hrs)			Peak Hours (20:00 Hrs)			Day Energy (MU)		
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MU)	IEX / PXIL (MU)	Total (MU)
Punjab	1291	0	0	1265	0	0	30.38	0.64	31.03
Delhi	322	300	-51	432	344	-2	9.51	7.16	16.67
Haryana	1242	16	0	1623	16	0	35.70	-3.90	31.80
HP	-1197	-152	0	-944	-206	0	-24.35	-3.51	-27.86
J&K	-681	-140	0	-436	60	0	-11.54	-1.62	-13.16
CHD	0	0	0	0	0	0	0.24	0.19	0.43
Rajasthan	-900	938	0	-800	-53	2	-20.46	8.27	-12.20
UP	850	458	49	172	0	0	9.05	16.47	25.52
Uttarakhand	93	-8	0	93	-8	0	2.23	-0.20	2.03
Total	1020	1410	-1	1404	152	0	30.75	23.51	54.27

X(B). Short-Term Open Access Details:

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1300	1235	507	0	0	0
Delhi	442	297	752	-448	0	-51
Haryana	1685	1236	17	-992	0	0
HP	-919	-1197	-102	-206	0	0
J&K	-377	-681	60	-191	0	0
CHD	30	0	49	0	0	0
Rajasthan	-751	-901	1534	-86	2	0
UP	850	172	936	0	49	0
Uttarakhand	93	93	-8	-8	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 29.08.2014 :**

1. Normal weather in NR.

XIV. Synchronisation of new generating units :

0.00

XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / substation :**XVI. Tripping of lines in pooling stations :****XVII. Complete generation loss in a generating station :**